CLAIMS

What is claimed is:

1.   An expert diagnostic service method comprising the steps of:

collecting data related to effective fixes corresponding to various symptoms from a plurality of diagnostic systems via a data transmission network;

accumulating the number of each effective fix corresponding to each of the various symptoms; and

assigning at least one effective fix to one of the various symptoms based on a result of the accumulating step.

2.   The method of claim 1 further rendering a result of the assigning step available to at least one of the plurality of diagnostic systems.

3.   The method of claim 1, wherein the accumulating step comprises the steps of:

receiving a validation result including validated effective fixes corresponding to each of the various symptoms; and

accumulating the number of each validated effective fix corresponding to each of the various symptoms.

4.   The method of claim 1, wherein the plurality of diagnostic systems are selected from the group consisting of an engine analyzer, an aligner, a balancer, and a battery tester.

5.   The method of claim 1, wherein the diagnostic systems are configured to diagnose a vehicle or a patient.

6.   The method of claim 1, further generating data including the at least one effective fix assigned to the one of the various symptoms.

7.   The method of claim 6 further comprising the steps of:

receiving a request to access to the data including the at least one effective fix assigned to the one of the various symptoms from one of the plurality of diagnostic systems via the data transmission network;

transmitting the data including the at least one effective fix assigned to the one of the various symptoms to the one of the plurality of diagnostic systems via the data transmission network; and

receiving data related to effective fixes corresponding to various symptoms from the one of the plurality of diagnostic systems via the data transmission network.

8.   An expert diagnostic service method comprising the steps of:

collecting data related to effective diagnostic results corresponding to various faults from a plurality of diagnostic systems via a data transmission network;

accumulating the number of each effective diagnostic result corresponding to each of the various faults; and

assigning at least one effective diagnostic result to one of the various faults based on a result of the accumulating step.

9.   The method of claim 8, further rendering a result of the assigning step available to at least one of the plurality of diagnostic systems.

10.   The method of claim 8, wherein the accumulating step comprises the steps of:

receiving a validation result including validated effective diagnostic results corresponding to each of the various faults; and

accumulating the number of each validated diagnostic result corresponding to each of the various faults.

11.   The method of claim 8, wherein the data related to effective diagnostic results includes at least one of attributes related to an apparatus under diagnosis, a cause of a fault, a test for finding a cause of a fault, and a fix to cure a cause of a fault.

12.   The method of claim 8, wherein the diagnostic systems are configured to diagnose a vehicle or a patient.

13.   The method of claim 8 further generating data including the at least one effective diagnostic result assigned to the one of the various faults.

14.   The method of claim 13 further comprising the steps of:

receiving a request to access to the data including the at least one effective fix assigned to the one of the various symptoms from one of the plurality of diagnostic systems via the data transmission network;

transmitting the data including the at least one effective fix assigned to the one of the various symptoms to the one of the plurality of diagnostic systems via the data transmission network; and

receiving data related to effective diagnostic results corresponding to various faults from the one of the plurality of diagnostic systems via the data transmission network.

15.   A data processing system for providing expert diagnostic services comprising:

a data processor for processing data;

a data communication port for connecting to a data transmission network;

a data storage device for storing instructions; and

a data transmission path coupled to the data processor, the data communication port, and the data storage device;

wherein the instructions, when executed by the data processor, control the data processing system to perform the machine-implemented steps of:

receiving data related to effective diagnostic results corresponding to various faults from a plurality of diagnostic systems via the data transmission network;

accumulating the number of each effective diagnostic result corresponding to each of the various faults; and

assigning at least one effective diagnostic result to one of the various faults based on a result of the accumulating step.

16. The system of claim 15, wherein the storage device further stores instructions that, when executed by the data processor, control the data processing system to render a result of the assigning step available to at least one of the plurality of diagnostic systems.

17. The system of claim 15, wherein the storage device further stores instructions that, when executed by the data processor, control the data processing system to perform the machine-implemented steps of:

receiving a validation result including validated effective diagnostic results corresponding to each of the various faults; and

accumulating the number of each validated diagnostic result corresponding to each of the various faults that is valid according to the validation result.

18. The system of claim 15, wherein the data related to effective diagnostic results includes at least one of attributes related to an apparatus under diagnosis, a cause of a fault, a test for finding a cause of a fault, and a fix to cure a cause of a fault.

19.   The system of claim 15, wherein the diagnostic systems are configured to diagnose a vehicle or a patient.

20.   The system of claim 15, the storage device further stores instructions, when executed by the data processor, control the data processing system to generate data including the at least one effective diagnostic result assigned to the one of the various faults.

21.   The system of claim 20, wherein the storage device further stores instructions that, when executed by the data processor, control the data processing system to perform the machine-implemented steps of:

receiving a request to access to the data including the at least one effective fix assigned to the one of the various symptoms from one of the plurality of diagnostic systems via the data transmission network;

transmitting the data including the at least one effective fix assigned to the one of the various symptoms to the one of the plurality of diagnostic systems via the data transmission network; and

receiving data related to effective diagnostic results corresponding to various faults from the one of the plurality of diagnostic systems via the data transmission network.

22.   A machine-rea+dable medium bearing instructions for providing expert

diagnostic services, the instructions upon execution by a data processing system

causing the data processing system to perform the steps of:

receiving data related to effective diagnostic results corresponding to various

faults from a plurality of diagnostic systems via the data transmission network;

accumulating the number of each effective diagnostic result corresponding to

each of the various faults; and

assigning at least one effective diagnostic result to one of the various faults

based on a result of the accumulating step.

23.   The medium of claim 8, further bearing instructions that, upon execution

by a data processing system, cause the data processing system to render a result of the

assigning step available to at least one of the plurality of diagnostic systems.

24.   The medium of claim 22 further bearing instructions upon execution by a

data processing system causing the data processing system to perform the machine-

implemented steps of:

receiving a validation result including validated effective diagnostic results

corresponding to each of the various faults; and

accumulating the number of each validated diagnostic result corresponding to

each of the various faults that is valid according to the validation result.

25. The medium of claim 22, wherein the data related to effective diagnostic results includes at least one of attributes related to an apparatus under diagnosis, a cause of a fault, a test for finding a cause of a fault, and a fix to cure a cause of a fault.

26. The medium of claim 22, wherein the diagnostic systems are configured to diagnose a vehicle or a patient.

27. The medium of claim 22 further bearing instructions upon execution by a data processing system causing the data processing system to generate data including the at least one effective diagnostic result assigned to the one of the various faults.

28. The medium of claim 27 further bearing instructions that, upon execution by a data processing system, cause the data processing system to perform the machine-implemented steps of:

receiving a request to access to the data including the at least one effective fix assigned to the one of the various symptoms from one of the plurality of diagnostic systems via the data transmission network;

transmitting the data including the at least one effective fix assigned to the one of the various symptoms to the one of the plurality of diagnostic systems via the data transmission network; and

receiving data related to effective diagnostic results corresponding to various faults from the one of the plurality of diagnostic systems via the data transmission network.

29.   The method of claim 1, wherein the data related to effective diagnostic results includes at least one of attributes related to an apparatus under diagnosis, a cause of a fault, a test for finding a cause of a fault, and a fix to cure a cause of a fault.

30.   The method of claim 29, further generating a fault prediction based on the data related to effective diagnostic results.

31.   The method of claim 30, wherein the fault prediction includes a possible fault that may be experienced by a specific component.

32.   The method of claim 11 further generating a fault prediction based on the data related to effective diagnostic results.

33.   The method of claim 32, wherein the fault prediction includes a possible fault that may be experienced by a specific component.

34.   The system of claim 18, wherein the storage device further stores instructions that, when executed by the data processor, control the data processing system to generate a fault prediction based on the data related to effective diagnostic results.

35.   The system of claim 34, wherein the fault prediction includes a possible fault that may be experienced by a specific component.

36. The medium of claim 25 further bearing instructions that, upon execution by a data processing system, cause the data processing system to generate a fault prediction based on the data related to effective diagnostic results.

37. The medium of claim 36, wherein the fault prediction includes a possible fault that may be experienced by a specific component.

38. An expert diagnostic service method comprising the steps of:

collecting data related to effective fixes corresponding to various symptoms from a plurality of diagnostic systems via a data transmission network;

accumulating the number of each effective fix corresponding to each of the various symptoms;

generating an index for each effective fix corresponding to each of the various symptoms based on a result of the accumulating step; and

assigning at least one effective fix to one of the various symptoms based on the index for each effective fix corresponding to each of the various symptoms.